

Appeal Brief

In response to Final Office Action of February 17, 2006

IN THE UNITED STATES

PATENT AND TRADEMARK OFFICE

Appl. No. : 10/085,379

Applicant(s) : Itoh, Hiroshi

Filed : 02/28/2002

Title : MACHINE TRANSLATION SYSTEM, METHOD AND PROGRAM

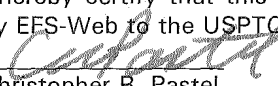
TC/A.U. : 2626

Examiner : Pierre, Myriam

Atty. Docket : JP920000402US1

CERTIFICATE OF MAILING OR TRANSMISSION

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Christopher R. Pastel

APPEAL BRIEF under 37 C.F.R. § 41.37

Mail Stop Appeal Brief-Patents

Honorable Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

In response to the Final Office Action of February 17, 2006, please accept the following Appeal Brief in the above referenced application.

Real Party In Interest

The real party in interest is the assignee, International Business Machines Corporation, Armonk, New York 10504.

Related Appeals and Interferences

None.

Status of Claims

Claims 1-24 are pending and finally rejected.

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No amendments were filed after the final rejection of February 17, 2005.

Summary of Claimed Subject Matter

A machine translation system includes a translated text creator for creating a translated text in which an original text in a first language is translated into the translated text in a second language while an unknown word not registered in at least one dictionary is left in the first language, with the translated text displayed (spec. page 11 lines 8-10 and Fig. 5). A link setter for setting a link for the unknown word in the first language in the translated text is displayed by the display for which an instruction is provided (spec. page 11, lines 12-13 and Fig. 5). A search for the unknown word in the first language is conducted using the unknown word as a search word in a predetermined Internet search engine based on the first language (spec. page 11, lines 13-15 and Figs. 5-13).

Grounds of rejection to be reviewed on appeal

Whether claims 1-24 are unpatentable under 35 U.S.C. § 103(a) over Morimoto et al. in view of Smith III?

Argument

Note: only the claim limitations of the independent claims are argued herein. The additional limitations of the dependent claims are not being argued in this appeal.

Argument 1: the examiner did not meet the burden of establishing a prima facie rejection.

To sustain a prima facie rejection under 35 U.S.C. § 103(a) there must be some suggestion or motivation either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. *Carela v. Starlight Archery*, 231 USPQ 644 (Fed. Cir. 1986). The prior art must suggest the desirability of the claimed invention, and the fact that the references can be combined or modified is not sufficient to sustain a rejection under 35 U.S.C. § 103(a). *Ex parte Krantz*, 19 USPQ2d 1216, at 1217-1218 (1990). *See also, Ex parte Levengood*, 28 USPQ2d 1300, 1301 (Bd. Pat. App. & Int. 1993). There must be a reason apparent to one skilled in the art at the time

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of the invention for applying the teaching at hand, or the use of the teaching as evidence of obviousness entails prohibited hindsight. *Graham v. John Deere Co.*, 383 US 1, 148 USPQ 459 (1966).

The above law is elaborated on in MPEP § 2143. As Section 2143.01 states, the prior art must suggest the desirability of the claimed invention, and the fact that references can be combined or modified is not sufficient to establish prima facie obviousness. The Examiner states that it would have been obvious to modify Morimoto's translation of unknown words via dictionary servers into Smith's predetermined Internet search engine to allow users to add or edit link databases in order for users to have editorial control thus avoiding the result of dictionary websites which tend to offer far less information relative to the index websites.

Unfortunately, the Examiner does not state where in the prior art references this motivation comes from. Scrutiny of the cited references does not reveal that this motivation was recognized by either Morimoto or Smith. Morimoto simply does not recognize the limitations of dictionary websites, which tend to offer far less information relative to the index websites, because when Morimoto can't find a word in its own dictionary, it looks to other dictionaries on the Internet (col. 12, lines 1-6). Morimoto recognizes that this can lead to problems, so an elaborate prioritization scheme is developed (remainder of col. 12). That is, Morimoto recognizes problems with its own methods and devises solutions to them. There is no discussion in Morimoto about looking to a general Internet search rather than looking to a dictionary search, which would further exacerbate the problems that Morimoto is trying to solve. In that sense, Morimoto teaches away from the combination. The Smith reference isn't even about translations or machine translations, but rather is about a method for facilitating linking on the web. As such, there is nothing to be found in Smith which provides the motivation to combine which is a necessary part of an obviousness rejection. Therefore, the rejection is invalid.

In addition, Smith and Morimoto are not analogous arts. As the Field of the Invention section of the specification states, the field of the invention is a machine translation system. Morimoto is within the field of the invention, but Smith is not. Smith is not directed, nor does it even mention, any sort of machine translation or any translation at all. There is no "first

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language" and "second language" in Smith. Smith is in a non-analogous field. Therefore, under MPEP § 2141.01(a), the Examiner cannot combine Smith with Morimoto, and the rejection is invalid. The Examiner states that Smith is reasonably pertinent to the particular problem with which the applicant was concerned, and that therefore Smith may be relied upon to make this rejection. The problem with this reasoning is that Smith is about a method for facilitating linking on the web, which is not identified as a problem in the instant application, nor is it discernable from reading the instant application that it was a problem.

Furthermore, while it is acknowledged that Smith teaches a predetermined Internet search engine (although not based on the "first language" because Smith doesn't teach first and second languages), Smith does not teach a link setter for the unknown word, because Smith doesn't have any "unknown words" as this term would be understood by one of ordinary skill in the art. This is because Smith is not directed to machine translations, so the concept of unknown word as defined in the instant specification (page 2, lines 6-9) does not exist in Smith. Therefore, even combining Smith with Morimoto does not yield the claimed invention because of the missing feature, "a link setter for setting a link for said unknown word in said first language" as is elaborated upon below.

Because there is no motivation to combine features of the references, the examiner has not presented a *prima facie* case of obviousness. The rejection is therefore in error.

Argument 2: combining the references does not yield the claimed invention.

Even if the elements of Morimoto et al. and Smith III are combined, the elements of the present claimed invention are not found.

The Examiner mistakenly characterizes Morimoto et al.'s searching of other dictionaries via the Internet as being the same as the Applicants' using a predetermined Internet search engine. The two are not the same. In the case of Morimoto et al., the Internet is the communications link which connects Morimoto et al.'s apparatus with dictionaries (content storers) which are located elsewhere. In the case of the Applicants' device, the Internet is not only the communications link, but also the content storer; i.e., the Internet search engine searches the Internet to attempt to find the translation. In other words, there is a big difference between

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simply using the Internet to access other dictionary sites and using an Internet search engine to search the Internet itself as claimed in the present application. Morimoto (col. 14, lines 53-60 and Fig. 18) does not mention using an Internet search engine, but merely shows how a request to a dictionary located elsewhere is handled.

When Morimoto et al. can't find a word in its own dictionary, it looks to other dictionaries on the Internet (col. 12, lines 1-6). Morimoto et al. recognizes that this can lead to problems, so an elaborate prioritization scheme is developed (remainder of col. 12). That is, Morimoto et al. recognizes problems with its own methods and devises solutions to them. There is no discussion in Morimoto et al. about looking to a general Internet search rather than looking to a dictionary search, which would further exacerbate the problems that Morimoto et al. is trying to solve. Morimoto et al. therefore actually teaches away from using an Internet search engine, which further argues against a motive to combine references.

The Smith III reference isn't about translations or machine translations, but rather is about a method for facilitating linking on the web. There is no "first language" and "second language" in Smith III. While it is acknowledged that Smith III teaches a predetermined Internet search engine (although not based on the "first language" because Smith III doesn't teach first and second languages), Smith III does not teach a link setter for the unknown word, because Smith III doesn't have any "unknown words" as that term would be understood by one of ordinary skill in the art. This is because Smith III is directed to establishing hyperlinks for certain words or phrases and is not directed to machine translations, so the concept of unknown word as defined in the specification (page 2, lines 6-9) does not exist in Smith III. Smith III uses the concept of "word being looked up" (col. 6, lines 27-29), but the "word being looked up" is not an unknown word as that term is used in the instant patent application.

In the instant patent application, lines 6-9 on page 2 of the specification states, "In the conventional machine translation systems, any word not registered in the dictionaries (hereinafter sometimes referred to as "unknown word") cannot be translated. Therefore, a user must consult, for example, a paper dictionary for an appropriate translation word or equivalent for the unknown word, which would result in inefficient and inconvenient translation word searching."

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Smith III does not actually look up a "definition" but rather provides a link installation service which automatically installs hyperlinks within information submitted to the service by hypertext authors (col. 3, lines 49-52). Smith III thus provides the equivalent of footnotes to words and phrases based on the hypertext authors' desires. The claimed invention, on the other hand, automatically installs a hyperlink for an untranslatable word not found in any of the dictionaries the machine translation system or program has access to.

Therefore, even combining Smith III with Morimoto et al. does not yield the claimed invention because of the missing features, "a link setter for setting a link for said unknown word in said first language in said translated text displayed by said display for which an instruction is provided, such that a search for said unknown word in said first language is conducted using said unknown word as a search word in a predetermined Internet search engine based on said first language." Because the combination of references does not produce the claimed invention, Applicants respectfully suggest that the rejection is in error.

Respectfully submitted,



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CLAIMS APPENDIX

1. A machine translation system comprising:

a translated text creator for creating a translated text in which an original text in a first language is translated into said translated text in a second language while an unknown word not registered in at least one dictionary is left in said first language;

a translated text display for displaying said translated text created by said translated text creator; and

a link setter for setting a link for said unknown word in said first language in said translated text displayed by said display for which an instruction is provided, such that a search for said unknown word in said first language is conducted using said unknown word as a search word in a predetermined Internet search engine based on said first language.

2. The machine translation system of claim 1, further comprising a field detector for detecting a field relevant to a subject matter of said original text, wherein said link setter sets said link for said unknown word in said first language so as to search for said unknown word in one of a plurality of search fields of said Internet search engine which corresponds to said field detected by said field detector.

3. The machine translation system of claim 2, wherein said link setter stores settings about said Internet search engine which are to be used for searching for said unknown word for each of said fields detected by said field detector.

4. The machine translation system of claim 2, further comprising:

a search result list display for displaying a search result list of Web pages relevant to said unknown word as found by said Internet search engine in response to said instruction given by a user for executing said search for said unknown word for which said link has been set by said link setter;

an unknown word related Web page display for displaying a Web page which has been selected from said search result list by said user; and

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a translation word registrar for generating a translation word registration screen which allows said user to edit and register a translation word for said unknown word, and for registering said translation word in said at least one dictionary, in association with said field relevant to said subject matter of said original text which contains said unknown word.

5. The machine translation system of claim 1, further comprising a search engine changer for changing said Internet search engine to which said link is set by said link setter.

6. The machine translation system of claim 1, further comprising:

a search result list display for displaying a search result list of Web pages relevant to said unknown word as found by said Internet search engine in response to said instruction given by a user for executing said search for said unknown word for which said link has been set by said link setter;

an unknown word related Web page display for displaying a Web page which has been selected from said search result list by said user; and

a translation word registrar for generating a translation word registration screen which allows said user to edit and register a translation word for said unknown word, and for registering said translation word for said unknown word in said at least one dictionary.

7. The machine translation system of claim 6, further comprising an unknown word related Web page translator for translating said Web page displayed by said unknown word related Web page display, into said second language.

8. The machine translation system of claim 6, further comprising a re-translation controller for instructing re-translation of said original text containing said unknown word after said translation word registrar has performed registration of said translation word for said unknown word.

9. A machine translation method comprising:

creating a translated text in which an original text in a first language is translated into said translated text in a second language while an unknown word not registered in at least one dictionary is left in said first language;

displaying said translated text; and

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setting a link for said unknown word in said first language in said translated text displayed by said displaying of said translated text for which an instruction is provided, such that a search for said unknown word in said first language is conducted using said unknown word as a search word in a predetermined Internet search engine based on said first language.

10. The machine translation method of claim 9, further comprising detecting a field relevant to a subject matter of said original text, wherein said setting of said link sets said link for said unknown word in said first language so as to search for said unknown word in one of a plurality of search fields of said Internet search engine which corresponds to said field detected by said detecting of said field.

11. The machine translation method of claim 10, wherein said setting of said link stores settings about said Internet search engine which are to be used for searching for said unknown word for each of said fields detected by said detecting of said field.

12. The machine translation method of claim 10, further comprising:

displaying a search result list of Web pages relevant to said unknown word as found by said Internet search engine in response to said instruction given by a user for executing said search for said unknown word for which said link has been set by said setting of said link;

displaying an unknown word related Web page which has been selected from said search result list by said user; and

generating a translation word registration screen which allows said user to edit and register a translation word for said unknown word, and registering said translation word in said at least one dictionary, in association with said field relevant to said subject matter of said original text which contains said unknown word.

13. The machine translation method of claim 9, further comprising changing said Internet search engine to which said link is set by said setting of said link.

14. The machine translation method of claim 9, further comprising:

displaying a search result list of Web pages relevant to said unknown word as found by said Internet search engine in response to said instruction given by a user for executing said search for said unknown word for which said link has been set by said setting of said link;

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displaying an unknown word related Web page which has been selected from said search result list by said user; and

generating a translation word registration screen which allows said user to edit and register a translation word for said unknown word, and registering said translation word for said unknown word in said at least one dictionary.

15. The machine translation method of claim 14, further comprising translating said unknown word related Web page displayed by said displaying of said unknown word related Web page, into said second language.

16. The machine translation method of claim 14, further comprising instructing re-translation of said original text containing said unknown word relevant to said translation word after said translation word has been registered by said registering of said translation word.

17. A machine translation program usable by a computer to cause said computer to:

create a translated text in which an original text in a first language is translated into said translated text in a second language while an unknown word not registered in at least one dictionary is left in said first language;

display said translated text; and

set a link for said unknown word in said first language in said translated text displayed by said displaying of said translated text for which an instruction is provided, such that a search for said unknown word in said first language is conducted using said unknown word as a search word in a predetermined Internet search engine based on said first language.

18. The machine translation program of claim 17, further causing said computer to detect a field relevant to a subject matter of said original text, wherein said setting of said link sets said link for said unknown word in said first language so as to search for said unknown word in one of a plurality of search fields of said Internet search engine which corresponds to said field detected by said detecting of said field.

19. The machine translation program of claim 18, wherein said setting of said link stores settings about said Internet search engine which are to be used for searching for said unknown word for each of said fields detected by said detecting of said field.

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20. The machine translation program of claim 18, further causing said computer to:

display a search result list of Web pages relevant to said unknown word as found by said Internet search engine in response to said instruction given by a user for executing said search for said unknown word for which said link has been set by said setting of said link;

display an unknown word related Web page which has been selected from said search result list by said user; and

generate a translation word registration screen which allows said user to edit and register a translation word for said unknown word, and register said translation word in said at least one dictionary, in association with said field relevant to said subject matter of said original text which contains said unknown word.

21. The machine translation program of claim 17, further causing said computer to change said Internet search engine to which said link is set by said setting of said link.

22. The machine translation program of claim 17, further causing said computer to:

display a search result list of Web pages relevant to said unknown word as found by said Internet search engine in response to said instruction given by a user for executing said search for said unknown word for which said link has been set by said setting of said link;

display an unknown word related Web page which has been selected from said search result list by said user; and

generate a translation word registration screen which allows said user to edit and register a translation word for said unknown word, and register said translation word for said unknown word in said at least one dictionary.

23. The machine translation program of claim 22, further causing said computer to translate said unknown word related Web page displayed by said displaying of said unknown word related Web page, into said second language.

24. The machine translation program of claim 22, further causing said computer to instruct re-translation of said original text containing said unknown word relevant to said translation word after said translation word has been registered by said registering of said translation word.

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EVIDENCE APPENDIX

None.

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RELATED PROCEEDINGS APPENDIX

None.